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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,731	01/11/2002	Raj Prakash	004-6540	1596

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EXAMINER	
MITCHELL, JASON D	
ART UNIT	**PAPER NUMBER**
2193	

DATE MAILED: 02/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/044,731	Applicant(s) PRAKASH, RAJ	
	Examiner Jason Mitchell	Art Unit 2193	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 16 January 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires _____months from the mailing date of the final rejection.
   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *1-8 33-48*.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
13. ☐ Other: _____.

Continuation of 11: The amendment does NOT place the application in condition for allowance because: Applicant's arguments were not persuasive.

On pg. 7, Applicant states:

> Kawahito discloses eliminating null pointer condition checks that are redundant, and fails to disclose or suggest eliminating null pointer condition checks as recited in the claims.

And in the paragraph bridging pp. 8-9 Applicant goes on to state:

> The Examiner characterizes Kawahito as disclosing elimination of null pointer condition check, but disregards Kawahito's actual disclosure of eliminating redundant null pointer condition checks and null pointer condition checks that can be converted into hardware traps.

Examiner respectfully disagrees. While Kawahito does eliminate any redundant null checks, this is not all the reference teaches. Kawahito teaches two phases. In phase 1 (as described in the 4th full paragraph in col. 2 of pg. 139) Kawahito only eliminates redundant null checks, but in phase 2 (as described in the 5th full paragraph in col. 2 of pg. 139) Kawahito clearly discloses 'null checks are converted to hardware traps where ever possible' before even considering redundancy.

Further Applicant appears to be arguing that there is some distinction between converting a null pointer condition check to a hardware trap and replacing a null pointer condition check with exception handling. This is not the case. (see pg. 139, col. 1, par. 3 'In practice, the implementation of null checking can take advantage of hardware traps ... accessing the zero address (page) will throw an exception to the application, and thus no explicit instruction has to be generated to check the null pointer').

On pp. 7-9 Applicant argues against Examiners motivation to combine. As detailed in previous actions and the corresponding rejections, Examiner feels there is sufficient motivation to make the described combination.

On pg. 8 Applicant states:

> The Examiner fails to appreciate that code that handles an exception likely handles null pointer condition arising from multiple null pointer condition checks. Frequent execution of the handler does not necessarily indicate frequency of each of the null pointer condition checks encountering null pointer conditions. In addition, infrequent execution of exception handling code does not indicate whether or not multiple corresponding null pointer condition checks encountering null pointer conditions.

Examiner respectfully disagrees. First, note that the claims recite limitations of 'eliminating the null pointer condition check, if the null pointer condition check infrequently encounters null pointer conditions'. And further note that this 'eliminating' consists of replacing the 'null pointer condition check' with fault handling code. Thus the determination of the frequency / infrequency of a null pointer condition at a specific location in the code is unrelated to the exception handling code which is only inserted after the determination of frequency / infrequency is made.

Further, the 'hot trace selector' in Benitez selects 'arcs' (col. 29, lines 31-33 'if control passes through an arc'). 'Arcs' are defined by a flow of control from one block to another, or in this context from the 'null pointer condition' to the handler code (Col. 2, lines 62-63 'a control path from one block to another block is herein referred to as an arc'). Thus the 'hot trace selector' taught in Benitez is clearly capable of determining which block of code raised the null pointer condition (Col. 2, lines 62-63 'a control path from one block to another).

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